

# Enhancing Angels-Net Foundation's STEAM Program and Visibility

Cape Town Project Center 2020



To view the full project: <https://wp.wpi.edu/southafrica/projects/2020-projects/anf/>

## **Abstract**

Angels-Net Foundation (ANF) is a nonprofit organization that aims to empower immigrants and refugees to succeed in the Worcester community. This project's goal was to help ANF be better equipped to accomplish their mission of assisting immigrants and refugees through two objectives. The first, creating an interactive STEAM (Science, Technology, Engineering, Arts, and Mathematics) curriculum for ANF's afterschool program, was accomplished by testing 3 beta activities with middle school students, creating a PowerPoint containing 22 lessons, and creating a supplementary guidebook designed to aid the program's teacher. The second, enhancing ANF's visibility, was accomplished through the creation of a new website and an increased social media presence on Instagram, Facebook and LinkedIn. This was supplemented by a social media and website guidebook, along with outreach to local organizations with an updated sponsorship letter based off their original template.

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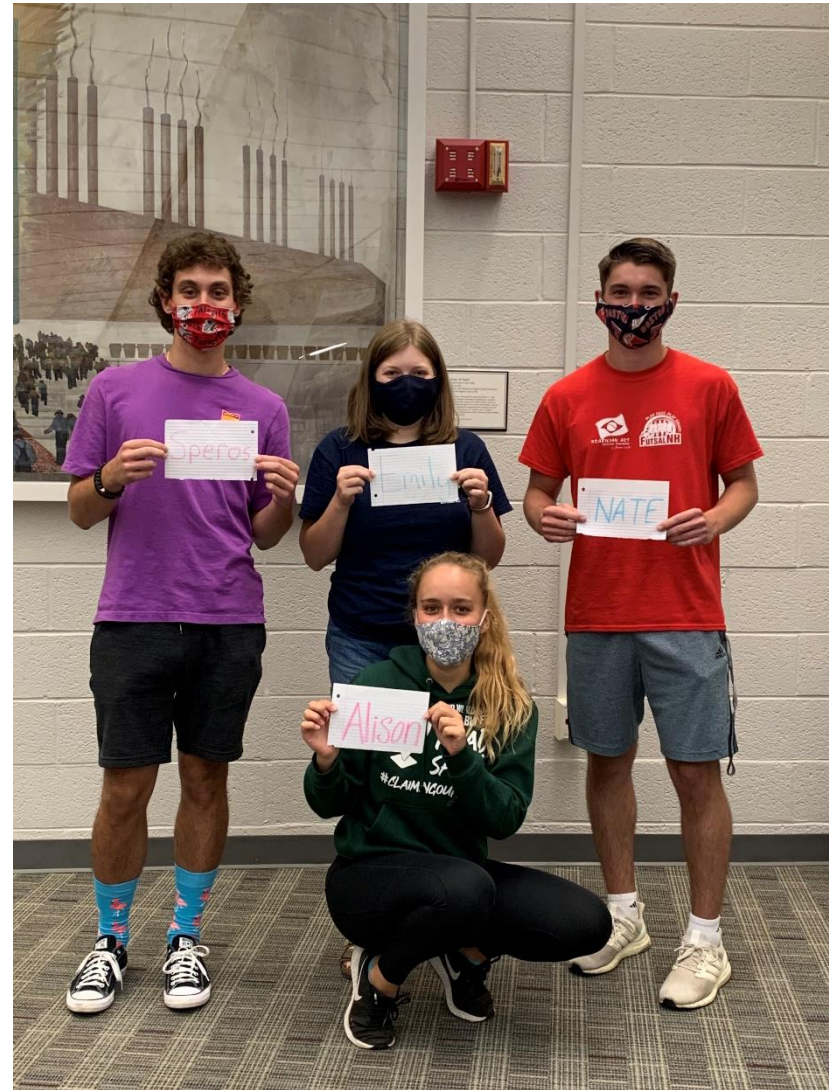
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## Executive Summary

Many immigrants and refugees enter the United States in search of new opportunities and safer living conditions. Over the last 20 years, an increasing number of immigrants entered the United States, many of which are from Africa in search of new opportunities and safer living conditions. As part of a sanctuary state that embraces immigrants, Worcester is home to around 38,000 immigrants (Seven Hills Foundation, 2015). From the years 2014 to 2018, the share of the foreign-born population in Worcester was 21.3% (United States Census Bureau, 2019). Immigrants have a notable impact on the STEAM field in the U.S. For example, a study found that for each 100 foreign-born workers in STEM fields with advanced U.S. degrees, an additional 262 jobs were created for U.S. citizens (American Immigration Council, 2017). However, adjusting to the U.S. education system may not be easy for immigrants initially. The 2019 SAT scores from the Worcester Public School system (Zhang, 2020), suggest that these positive impacts are not reflected in Worcester's immigrant student population. English learners averaged second percentile and Black students, some of whom are African immigrants, averaged sixteenth percentile. These results show that immigrant students struggle in the education system, and the 2019 Massachusetts Department of Elementary and Secondary Education (DESE) reports noted the inequalities specifically in science and math.

To combat these subject-specific differences, more knowledge about science, technology, engineering, art, and mathematics (STEAM) is required. According to the Committee on STEM Education of the National Science & Technology Council (Adams, 2018), STEAM improves

critical thinking, problem solving, higher order thinking, design, cooperation, perseverance, and digital literacy. The most successful STEAM programs utilize hands-on activities to combine formal and informal learning strategies, so the students are fully engaged in the learning process. These programs also utilize divergent thinking, which is a problem-solving method that requires one to think outside of the box to find innovative solutions (Theodore, 2020).



Figure 1: ANF Logo (ANF, 2020)

Thus, there has been a push for more comprehensive and accessible STEAM education in the nation. Some of these efforts have been led by non-governmental organizations, such as Angels-Net Foundation (ANF) (Figure 1), to additionally make the transition easier for immigrant learners. Mike and Maggie Jentzen founded ANF with the aim of empowering African refugees and immigrants to succeed in the Greater Worcester community. ANF offers programs for adults and children, that range from career workshops to ESL classes to afterschool programs. Prior to COVID-19, the afterschool program met regularly and included a STEAM-based component. COVID-19 impacted the students' involvement, making them less willing to join or engage in the virtual program, and thus the afterschool program has recently been on hiatus.

As a nonprofit organization, ANF relies heavily on donations and volunteers to run their programs, social media pages, and website. ANF often does not have the sufficient resources to further develop their programs, which may have been due to their outdated original website. However, taking advantage of the growing



prevalence of online spaces allows nonprofits, such as ANF, to create websites with updated technology and social media platforms that are essential for organization growth. Additionally, establishing a network to promote their mission is just as important and organizations such as schools, youth organizations, and religious organizations are great places to start reaching out to for increased visibility.

This project was started in order to address the issues previously stated involving STEAM education and the organization's low visibility. This project's goal was to help ANF empower African immigrants and refugees through two objectives. Figure 2 shows the methodology used to accomplish the separate objectives. The first was to create an interactive STEAM (Science, Technology, Engineering, Arts, and Mathematics) curriculum for their afterschool program. The second was to enhance ANF's visibility by creating a website and increasing their social media presence.

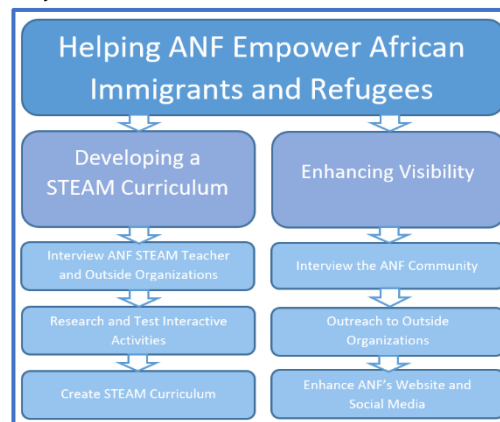


Figure 2: Methodology Flow Chart

The outcomes of the project are as follows:

1. A **STEAM Curriculum PowerPoint** with detailed lesson visual aids on 22 topics, to help ANF staff members/volunteers teach students can be seen in Figure 3.

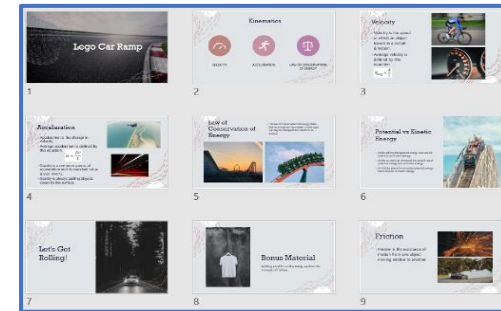


Figure 3: PowerPoint Activity Example

2. A **STEAM Curriculum Instructor's Guide** with detailed lesson plans on 22 topics, to help ANF staff members/volunteers teach students.
3. A new **Website** for ANF with a modern design and updated content about their organization that simplifies the volunteering and donation process (shown in Figure 4).

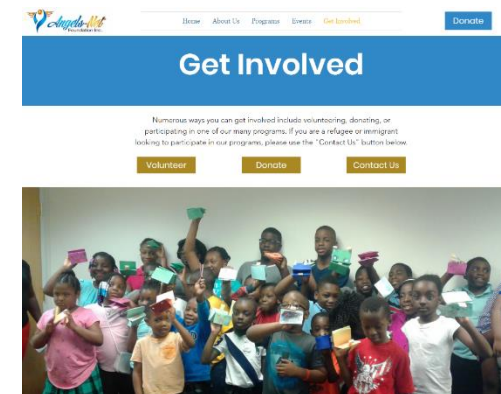


Figure 4: ANF's websites Get Involved page

4. **Social Media Pages** for the Instagram and LinkedIn platforms, and updated on Facebook. These pages aim to spread the visibility of ANF and what they do.

5. A **Social Media and Website Guidebook** to assist ANF members in updating and maintaining their social media pages and website.
6. **Outreach** to WPI student organizations, in order spread awareness of ANF. Along with this, a sponsorship letter was updated for the organization to send out to local businesses.

Based on the project's outcomes, our key recommendations for ANF are:

- To encourage their volunteer teachers to use the STEAM Curriculum (Instructor's Guide and PowerPoint) when teaching the students.
- To use the Social Media and Website Guidebook when maintaining the social media pages and website.
- To send the updated sponsorship letter to potential sponsors.

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## Angels-Net Foundation to Empower Refugees and Immigrants

Angels-Net Foundation, the project sponsor, is a nonprofit organization to empower refugees and immigrants while they adjust to life in Worcester. Founded by a Liberian refugee couple, Mike and Maggie Jentzen (shown in Figure 1), ANF serves immigrants and refugees from countries like Syria, Liberia, Sudan, Nigeria, Ghana, Cameroon, Philippines, Jamaica, and Haiti by offering programs for both youth and adults focusing on education, cultural learning, and job searching. The adult programs include career workshops, personalized support, and support groups. The youth programs include after-school

programs, summer programs, leadership development classes, safe family classes, and health and wellness classes. However, being a nonprofit comes with its struggles such as having insufficient volunteers and inadequate resources to develop programming further. Moreover, these issues were recently exacerbated due to the COVID-19 pandemic.



*Figure 1: Founders of Angels-Net (ANF, 2020)*

One of their most popular youth programs is the afterschool program, which is offered for students in grades 1-12 who attend a Worcester Public School. Prior to COVID-19, the program offered tutoring to help with homework, free snacks, and a facilitated play time. The afterschool program also included a STEAM-based component, run by volunteer teacher Bil Gardiner. The program was offered at the Wesley United Methodist Church on Tuesdays, Wednesdays, and Thursdays from 2:30-5:00PM, while Worcester Public Schools were in session. Due to the pandemic, the program is now offered virtually at varying times. This has strained resources, and with the pre-existing struggles mentioned above, there is

great potential for growth, so that ANF may further achieve their mission of empowering refugees and immigrants.

In today's technologically advanced society, many organizations make use of social platforms to raise money or to gain participants and volunteers. ANF relies heavily on donations and volunteers, but unfortunately has a limited social media presence and a slightly dated website. Thus, ANF has many opportunities for improvement in these virtual spaces.

## Angels-Net Foundation Participants

Immigrants and refugees are the heart and soul of the work of the Angels-Net Foundation. An immigrant is someone who relocates from their home country to a new country to take up permanent residency. Some of the reasons why people immigrate to the United States are to seek superior healthcare, to escape poverty, to offer better opportunities to their children, to reunify their family, to gain a better education, to marry someone, or to find better jobs or business opportunities (Nuñez, C., Sanchez, E., Sepehr, J., 2014). A refugee is a type of immigrant who travels to a different country specifically to flee from danger or persecution in their home country. As shown in Figure 2, some of the reasons why refugees move to the United States are to escape persecution based on race, religion, or nationality, to escape conflict or violence, and to find refuge after being displaced due to environmental factors (Nuñez, C., Sanchez, E., Sepehr, J., 2014).

Worcester is home to around 38,000 immigrants who come from over 85 countries (Seven Hills Foundation, 2015). From the years of 2014 to 2018, the percentage of the foreign-born population in Worcester equaled 21.3%

(United States Census Bureau, 2019). More recent waves of immigration into Worcester come from Ghana, the Dominican Republic, Vietnam, Albania, and Brazil (Welker, G., 2018). Furthermore, there has been an increase of immigrants and refugees from West African countries due to military conflicts, human and drug trafficking and piracy (Baker- Flynn et al., 2018).

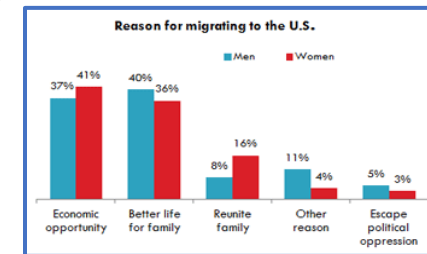


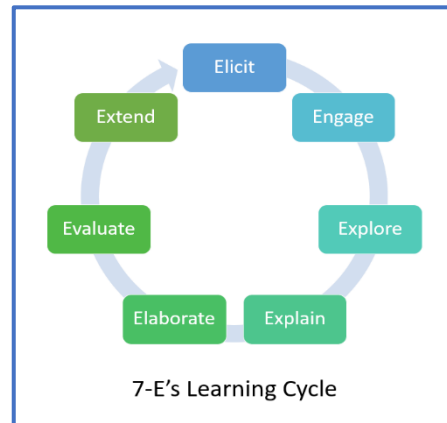
Figure 2: Reasons To Migrate to the US (Guillen-Woods, 2013)

Immigrant children, particularly those under the age of 18 whose choices are regulated by US federal law, face additional challenges. These challenges are experienced when adapting to a new environment, their living conditions, poverty, physical and mental health and especially, in the education system. Immigrant youth are currently the fastest growing population of students in the U.S. education system, but the education system is still unsure what the best strategies are for teaching them (Tienda & Haskins, 2011). Therefore, immigrant youth struggle academically in key subjects such as English, Math and Science.

## STEAM

STEAM stands for Science, Technology, Engineering, Arts, and Mathematics. According to the Committee on STEM Education of the National Science & Technology Council (Adams, 2018), STEAM improves critical thinking, problem solving, higher order thinking, design,

cooperation, perseverance, and digital literacy. Research has shown that exposing STEAM to children at a young age helps with understanding concepts easier. The most successful STEAM programs utilize hands-on



*Figure 3: 7-E's Learning Diagram*

activities to combine formal and informal learning strategies, so the students are fully engaged in the learning process. Hands-on activities are also designed to be very inexpensive so that under-resourced families can experience STEAM learning activities (Afterschool Alliance, 2020).

Divergent thinking is also applied to STEAM activities because it is a problem-solving method that requires one to think outside of the box in order to find innovative solutions (Theodore, 2020). The 7E learning cycle model is a recommended institutional approach in science curriculums that many teachers use today. As shown in Figure 3, the seven phases in the 7E learning cycle model are the Elicit, Engage, Explore, Explain, Elaborate, Evaluate, and Extend phases. Both the 7E learning cycle and divergent thinking can be applied to STEAM programs with the purpose of exposing children to different career paths that they otherwise may not have been introduced to yet.

Some useful organizations to gain insight on STEAM activities include National Society of Black Engineers (NSBE), HVK Children's Foundation, and WPI's Engineering

Ambassadors. These organization vary slightly, but all help teach and tutor kids between grades K-12 using fun and interactive STEAM activities.

## Visibility for Nonprofits

As a nonprofit, the Angels-Net Foundation relies heavily on donations and volunteers. Thus, increasing the turnout of donors and volunteers is crucial for ANF to succeed in their goal of empowering immigrants and refugees. Beneficial strategies for enhancing visibility to potential donors and volunteers include having an updated website and active social media accounts and reaching out to organizations for support.

Considering how crucial the internet is to everyday life, Wymer and Starnes (2008) state that it is critical for nonprofits to have a website with volunteer recruitment information. Moreover, they state that the website should provide a description of what volunteering for the organization would entail in addition to the organization's contact information such as an email or phone number. An organization's website must also be credible. Studies have shown one of the most effective ways to establish credibility is by listing donors and partners of the nonprofit (Long & Chiagouris, 2006).

Social Media is used by millions of Americans. Ankermann et al. (2017) states that two of the most used social media platforms in America are Facebook and Instagram, whose logos are shown in Figure 5. These are cost-effective platforms for a nonprofit to advertise their services. Along with this, they found that 89 percent of charitable organizations use some type of social media to market themselves, which indicates that it is vital that

nonprofit organizations have a social media presence in order to reach a new market of potential volunteers and donors.



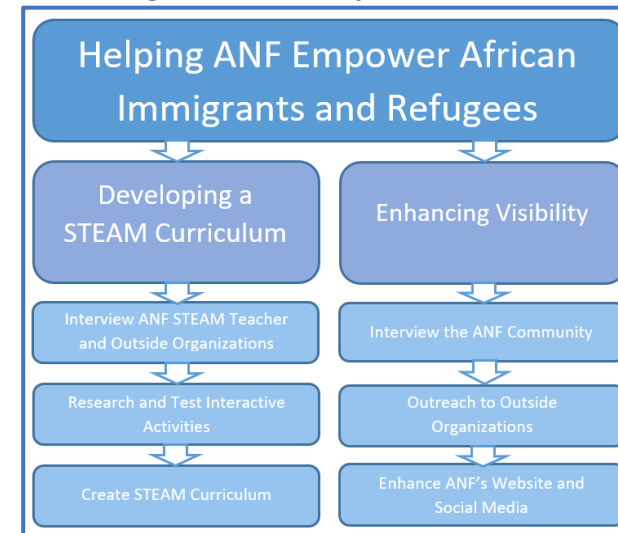
*Figure 5: Logos of Social Media Platforms  
(Instagram, 2020; Facebook, 2020; LinkedIn, 2020)*

There are various organizations that can be beneficial for a nonprofit to reach out to. Wymer and Starnes (2008) state that schools, youth organizations, and religious organizations are influential locations for partnership, volunteer recruitment, and donations. Many nonprofit goals align with religious beliefs. Schools are resourceful as they usually have clubs or organizations, such as fraternities and honors societies, which require and reward students for volunteer work. Furthermore, studies have shown that 81 percent of companies connected working with nonprofits to their overall business strategies (SAMHSA, 2005). This means that businesses are places nonprofits can reach out to in order to increase volunteer and donation turnouts.

## Methodology

The goal of our project was to enhance ANF's programs and visibility to help the organization provide a better foundation for refugees and immigrants to succeed in Worcester, MA. This was accomplished through two objectives:

1. Developing an interactive and fun STEAM curriculum for ANF's afterschool program.
2. Enhancing ANF's visibility.



*Figure 6: Methodology Flow Chart*

### STEAM Curriculum

The main methods of data collection were archival research and interviews. Through archival research and interviews, we:

1. **Identified** interactive activities for the kids to complete and how to create a STEAM curriculum.
2. **Interviewed ANF board members**, starting with afterschool STEAM teacher Bil Gardiner, in order to gain information on their program and those involved. Then with the staff and volunteers of existing STEM or STEAM afterschool programs in Worcester to gain insight on how to run actives and create a curriculum.



3. **Created interactive activities** by gaining information through archival research. STEAM concepts were used to create interactive activities designed to teach lessons for specific topics. The most successful STEAM programs combine formal and informal learning by creating interactive learning activities (Adams, 2018). These activities aimed to also improve critical thinking, problem solving, design, and cooperation. They were created following the 7E learning cycle method and by incorporating creativity and divergent thinking.
4. **Informed STEAM program parents** by sending a consent form and informational video to the parents stating our goals and purpose through working with the kids.
5. **Tested out the interactive activities** through three beta testing sessions. These sessions were held on Tuesdays and Thursdays from 4-5PM with the 6<sup>th</sup> to 9<sup>th</sup> graders and Bil Gardiner. These activities aimed to spark the children's interest and their learning experiences were gauged by using follow-up reviews. The reviews included one general opinion-based questions for each activity. For social media content, the students' parents were encouraged to send us pictures or short video testimonies of their child performing the activity.
6. **Created a STEAM Curriculum Instructor's Guide** using the Massachusetts Science and Technology framework. The follow-up review results from the trial activities showed us which activities were most interesting and which aspects of STEAM they either excelled or struggled with. The result then helped us create the STEAM curriculum based on hands-on

interactive activities. The instructor's guide included an outline of each activity, an overview of each PowerPoint slide, and additional materials. The overview of each PowerPoint slide included a script for the instructor, expectations for the students, and additional questions to ask.

7. **Created a STEAM Curriculum PowerPoint**, which consisted of 22 STEAM lessons and interactive activities, in PowerPoint form. The lessons were divided into 6 subjects: Physics, Biology, Math, Chemistry, Societal Sciences, and Technology.

### *Visibility*

To improve Angels-Net Foundation visibility, we:

1. **Interviewed** the staff and board members of ANF to gain more knowledge about the organization and create personal connections.
2. **Researched** lessons and tips from professional literature and applied them to the review of other non-profit organizations' websites and social media pages. For example, how these organizations convey their message, the type of aesthetic and branding display, website accessibility for people with disabilities, how often these platforms are updated, and how they encourage new people to volunteer.
3. **Created a new ANF website** based on our research and the interviews conducted with the staff and board members.
4. **Enhanced ANF's social media presence** by creating and updating social media profiles on Facebook, Instagram, and LinkedIn.

5. **Created a Social Media and Website Guidebook** to ensure the sustainability of the social media platforms.
6. **Conducted outreach to local organizations** by creating a sponsorship letter to be used when reaching out to new sponsors and partners such as local churches, businesses and schools. At WPI, we reached out to student clubs and organizations that include a community service component.

Using the methodology mentioned above, we achieved the outcomes listed below.

## STEAM Curriculum Outcomes

The STEAM curriculum provides ANF with an effective afterschool STEAM program that keeps students engaged in the learning process even through the COVID-19 pandemic.



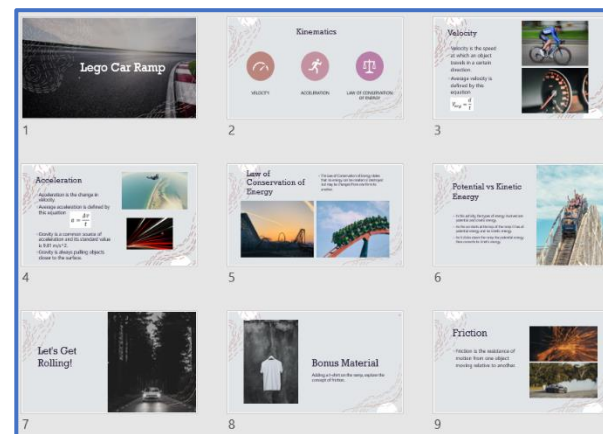
There are two main components to the STEAM curriculum, both of which were made as a result of the three beta activities we tested out with the students and their feedback. These activities were: an aerodynamics activity that involved students designing different paper airplanes, a mechanics-based activity that involved students building LEGO car (shown in Figure 7), and a kinematics activity that involved students rolling their LEGO cars down a ramp. While teaching the lessons and performing the activities, we noticed that the students

were hesitant to participate and confused about some activity steps. In response to this, we designed the STEAM Curriculum PowerPoint, and Instructor's Guide to incorporate more detailed instructions and engaging questions in our interactive activities. The first component, the ANF STEAM Curriculum PowerPoint, includes 22 lessons to be presented to the class. The ANF STEAM Curriculum Instructor's Guide is the second component and is only for the volunteers. This guide contains all the information and lesson plans to teach the material using interactive activities.

### PowerPoint Slides

Following the idea of the 7E learning model, it is paramount to engage with the students. If a volunteer led a lesson without the use of a visual stimulating tool such as a PowerPoint, the students would not be engaged. The PowerPoint includes 22 separate lessons that fall under the topics of physics, mathematics, biology, chemistry, societal science, and technology.

The STEAM Curriculum PowerPoint starts with an introduction



*Figure 8: STEAM Curriculum PowerPoint Activity* to explain to the ANF staff member that the slides are to be used by the "volunteer teacher" when conducting the STEAM activities with the students. Each individual

PowerPoint includes an introduction slide, explanations on the science behind the activity at hand, and an activity slide. As shown in Figure 8, the LEGO Car Ramp activity, slide 1 is the introduction slide, with a question to help engage the students. Slides 2-6 include the lesson material, slide 7 is the activity slide, and slides 8-9 include a bonus addition to the activity.

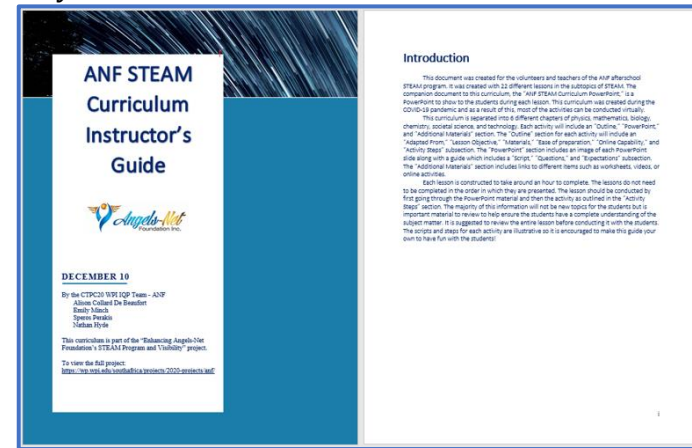
### ***Instructor's Guide***

When making a new curriculum, it is necessary to provide substantial information and advice on how to instruct the curriculum. Since ANF volunteers will be using our STEAM curriculum, we wanted to provide guidelines and assistance, so anyone would be able to teach the material. This guide will address these concerns by providing an outline of each activity, background information, additional worksheets, a script for the lesson, expectations, and questions for student engagement.

While testing out the beta activities with the ANF students through Zoom, we learned crucial information that convinced us we needed a STEAM Curriculum Instructor's Guide. Some of the students asked questions about the material that sometimes caught us off guard. In response to this, we decided to include any questions and answers the volunteers might expect. This will ensure that the volunteer is prepared to teach the material to the students.

As shown in Figure 9, the STEAM Curriculum Instructor's Guide starts off with an introduction that explains the content and purpose of the document. This is followed up by a table of contents that separates the activities into six different subjects including physics, mathematics, biology, chemistry, societal science, and technology. There are at least three different activities in each section with their

corresponding page number, so it is easier to find the activity.



***Figure 9: ANF STEAM Curriculum Instructor's Guide Introduction***

As shown in Figure 10, each activity consists of an outline section, PowerPoint section, and additional materials section. The outline section consists of lesson objectives, materials, and methods. The lesson objectives explain what the goal of the lesson is and what information the students should understand by the end of the activity. The materials for the activity, included as a bulleted list, need to be sent out to the students attending the class ahead of time. The methods explain how the class will perform the corresponding activity. The PowerPoint section shows smaller images of each lesson slide, along with a recommended script for the volunteer to follow. The scripts contain information about each slide, how to go through each slide, and engaging questions to ask. Expectations for each slide are also provided if necessary. The additional material section contains supplementary

worksheets, links, or any other information that go along with the activity.



Figure 10: ANF STEAM Curriculum Instructor's Guide Activity Example

In order to ensure the growth of ANF's programs, such as their STEAM program, the organization needed to enhance its visibility to potential volunteers, partners, and donors.

## ANF Visibility Outcomes

Angels-Net Foundation's visibility is essential for the organization to function since they rely heavily on volunteers and donations. Multiple steps were taken to increase visibility, the first being the creation of a new ANF website. The layout and the content of the website was updated to be more appealing to an audience who is willing to donate their time and money. Furthermore, the ANF social media pages such as Facebook were updated, and pages on LinkedIn and Instagram were created. In order to ensure the organization stays active on these platforms, a guidebook was created so the members of ANF can understand how to use each social media platform. Finally, organizations on the WPI campus were contacted about volunteering and partnering with ANF, and a new

sponsorship letter along with a list of outside organization was sent to ANF.

### Website

Angels-Net Foundation's original website, which was created using the platform Wix, had a dated layout and design. Along with this, the content on the website wasn't fully updated with the most up to date information. For nonprofits, websites are a crucial part of their visibility since they can be used to inform the public about what the organization does while also gaining volunteers and donations. For these reasons we decided to create a new updated website for the organization using the same Wix platform.

We researched ways to make the new website accessible and easy to use for everyone, particularly for people with disabilities, through online literature. We also looked through the websites of well-known and credible nonprofit organizations, such as African Community Education, Charity Water, and Pencils of Promise. We noted how the organizations laid out their website and used vibrant colors to create appealing aesthetics.

The final outcome was a completely updated version of the Angels-Net Foundation website, shown in Figure 11, that is more accessible and appealing to people who are



Figure 11: ANF's Website "Home Page"



considering donating or volunteering. The layout of the website was updated to include 5 main sections: “Home”, “About Us”, “Programs”, “Events”, and “Get Involved”. The “Home” section included a slide show of images with their mission statement, general information, and a COVID-19 update. The “About Us” section included in-depth information about the organization, the current sponsors and partners, and the ANF community members. The “Programs” section included updated information about the various programs for kids and adults, along with a “Kids Corner” tab which has worksheets and fun outside resources that kids can use. The “Events” section included information about previous and upcoming events that ANF held. Finally, the “Get Involved” section included information on how to donate, volunteer, and contact the organization.

To make volunteering and donating more straightforward, several updates were made (shown in Figure 12). The first was that a large donate button was

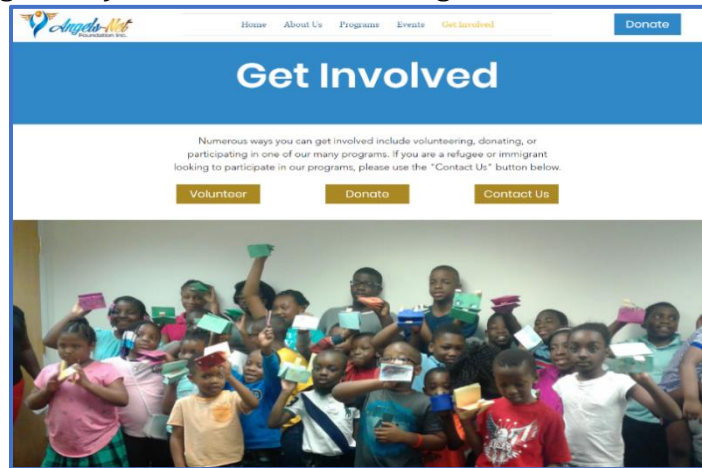


Figure 12: ANF's Websites "Get Involved"

included in the menu bar so people would always be reminded to donate no matter where they are on the website. Also, a google form was created and linked to the volunteer button on the volunteer page. This form made it easier for the volunteer to share their availability and what programs they were interested in.

In order to make the website accessible for people with disabilities, alt-text was added to every image so screen readers would be able to read and describe them. To further ensure screen readers work properly with the website, all acronyms included a period in between each letter. Along with this, the colors used for and around the text were chosen to ensure people with colorblindness could still read the website. Finally, since immigrants and refugees might be reading the site through google translate, we put key information in as simple and easily translatable a manner as possible.

### ***Social Media Pages***

Most of the world seems to be on social media nowadays, and for the younger generations, social media is the main form of interpersonal communication, especially throughout the COVID-19 pandemic. With this, it was only fitting that we create Instagram, Facebook, and LinkedIn pages for the Angels-Net Foundation. It was important for the Angels-Net Foundation to be represented on these sites in order to have visibility among the demographic that is most likely to volunteer for them – young adults.

Our findings showed that young adults use Instagram the most. Knowing this, we prioritized the development of ANF's new Instagram profile. On the Instagram page, we included their mission statement, website, and address in their bio, and made sure that the account was listed as a "Nonprofit Organization." We then posted content that reflected ANF's work and programming. We also followed members of the WPI community, other Worcester community organizations, and other refugee and immigrant support organizations. Their new page is shown in Figure 13.

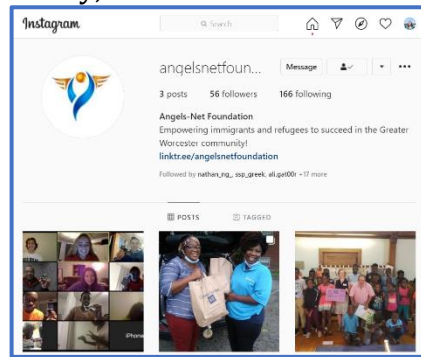


Figure 13: ANF's New Instagram Page

The content we included on ANF's new LinkedIn page was very similar to the work we did for their Instagram page. All basic contact and biographical information were added to their profile, in addition to an "About" section, part of which can be seen in Figure 14. We also made ANF's first post, introducing the organization to the LinkedIn community, and posted one job opening under the "Jobs" tab.

The content we updated on ANF's Facebook was also very similar to the content posted on Instagram. This is because their audiences are similar, except that Facebook's audience is slightly older. The content we posted focused around the afterschool program and our work with them.

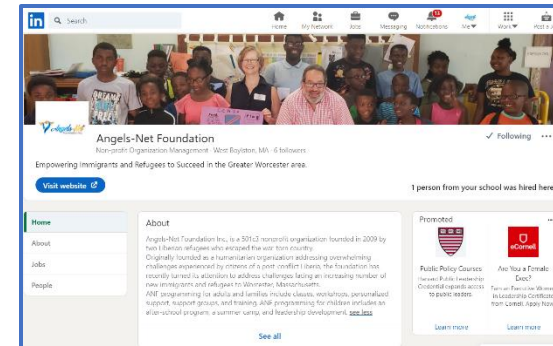


Figure 14: ANF's New LinkedIn Page.  
*Social Media and Website Guidebook*

Social media sites have many moving parts, and knowing of each, their function, and how to use them can be difficult, especially when working to create a successful profile. Because of this, we created a Social Media and Website Guidebook. This Social Media and Website Guidebook serves as an "assistant" for each platform, providing explanations on each feature and tool, in order to ensure the person who runs ANF's social media pages knows of the most effective techniques and how use that platform to ANF's advantage.

Our findings and background research gave us a comprehensive understanding on the algorithms for each platform. Meaning, how the algorithm affects the visibility of posts and profiles (how much and how often they are seen). With this information, we made sure to include detailed platform-specific sections, including what to post, when to post it, and analytics. Our research also led us to include a variety of tools to increase the accessibility of the new website we created for ANF. We felt that the features we implemented from this research were a little bit more complicated and obscure than most other Wix design tools,

and thus we decided it would be critical to include this information in the guidebook as well.

Having these social media pages and website is not the only key to success. Good management and creating fun content are just as important, and thus we included an “Additional Tools” section, featuring three other useful sites. These three sites were Hootsuite, Linktree, and Canva. Hootsuite is a social media manager, Linktree is a link organizer, compiling all links into one “tree” or “menu,” and Canva is a graphic design tool that can be used to enhance posts.

Our Social Media and Website Guidebook begins with an Introduction, pre-table of contents. The order of the social media platforms, post-table of contents, followed the order in which we developed them. First Instagram, followed by Facebook, then LinkedIn. We also added a section on YouTube, as it is another site ANF was interested in developing in the future. Then came the website’s section, and the Additional Tools section, described above. Each social media site was explained in four parts: “What to Post”, “When to Post”, “User Interface”, and “Analytics”. The “What to Post” section gives examples of what content to post. The “When to Post” recommends specific times to post. The “User Interface” section described how to physically use the tool or platform. Finally, the “Analytics” section explained how to see the site traffic data. We also created a “Post Planner” and a summary table for the various platforms, to compare and provide a holistic perspective of each social media (shown in Figure 15).

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Key:
1	2	3	4	5	6	7	FB - Facebook
			8-10am FB	1-3pm LI	9-10am FB		IG - Instagram
			2-4pm IG	10am-4pm FB			LI - LinkedIn
8	9	10	11	12	13	14	YT - YouTube
		8-11am FB	8-10am FB	FB*	9-10am FB		* - Story
		1-4pm IG	8-10am LI	IG*	IG		ANF Event
15	16	17	18	19	20	21	
	4pm YT		8-10am FB	10am-4pm FB	9-10am FB	FB*	
			2-4pm IG		8am-12pm LI	IG*	
22	23	24	25	26	27	28	
		8-11am FB	8-10am LI	12-4pm IG	9-10am FB		
			8-10am FB	8pm YT			
29	30						
	2-4pm IG						

Social Media Summary Table					
KEY INFORMATION	Social Media Platform				
	Instagram	Facebook	LinkedIn	YouTube	
	<b>Target Audience</b> (Age and Category)	• 18-34 y/o • Volunteers, Donors, Partners	• 24-55 y/o • Volunteers, Donors, Participants	• 36-55 y/o • Donors, Volunteers, Partners	• 15-55 y/o • Donors, Volunteers, Participants
	<b>When to Post</b> (By recommended order)	1. 2pm W 2. 1-4pm Tu 3. 12-4pm Th	1. 8-10am W 2. 9-10am F 3. 10am-4pm Thu	1. 8-11am W 2. 1-3pm Thu 3. 8am-12pm F	No specified time: Quality over Quantity

Figure 15: Social Media Post Planner (top) and Summary Table from Social Media and Website Guidebook (bottom) Outreach

As found through background research, it is important for nonprofits to have a network of donors and volunteers. Since ANF is a younger nonprofit and is still growing their network, we assisted them with outreach. As stated earlier, schools, religious organizations, and businesses are essential for nonprofits to reach out to. Because of this, we reached out to WPI’s chapter of Alpha Phi Omega, a service fraternity, and the WPI chapter of the National Society of Black Engineers about volunteering opportunities for ANF. Through collaboration with another IQP group in the Cape Town project center, we acquired a list of potential sponsors or partners for ANF which included African businesses and churches in the Worcester area. When reaching out to potential sponsors or partners, it is imperative for nonprofits to have an updated professional

sponsorship letter. For this, we took their outdated sponsorship letter template and added updates about their goals during and after the COVID-19 pandemic.

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## Recommendations

Based on the design of the STEAM curriculum and Social Media and Website Guidebook, along with the necessity of increasing visibility, our key recommendations for the Angels-Net Foundation include:

1. Encouraging their volunteer teachers use the STEAM Curriculum PowerPoint and STEAM Curriculum Instructor's Guide in the afterschool program.
2. Providing the curriculum documents to the volunteer teachers ahead of time, to allow for early planification of upcoming lessons, so ANF can then deliver the necessary materials to each of the students before the lesson.
3. Encouraging the use of the Social Media and Website Guidebook for information and ideas.
4. Sending the updated partnering letter to the African businesses and churches in the compiled list provided.

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